

## Colin Strout

Jurupa Valley, CA | [colin.j.strout@gmail.com](mailto:colin.j.strout@gmail.com) | (909)-682-4412 | [LinkedIn](#) | [GitHub](#) | [Personal Portfolio](#)

### EDUCATION

#### Vanderbilt University

Nashville, TN

*Bachelor of Engineering in Electrical and Computer Engineering and Mathematics, Minor in Computer Science*

May 2027

- **Relevant Coursework:** *Data Structures, Discrete Structures, Digital Systems*
- **GPA:** *3.97, Dean's List (all semesters)*

### EXPERIENCE

#### Oracle

Naples, FL

*Software Engineer Intern*

May 2025 - Present

- Collaborating with an international, cross-functional team to enhance and deploy a cloud-based flagship product for hospitality clients
- Designing and implementing an AI-powered feature to improve guest experience and streamline customer interactions within a leading hospitality management system

#### Vanderbilt University

Nashville, TN

*Undergraduate Research Assistant*

Jan 2025 – Present

- Developed driver for Bioimpedance channel of MAX3001 peripheral and integrated the driver with the peripheral's ECG channel to allow for simultaneous Electrocardiogram and Respiratory reading functionality of an integrated sensor using Rust
- Developed activation and identification features of an iOS application that enables a sensor to start reading in data and converting the data to an analog output within the application using Swift

### PROJECTS

#### NASA SUITS Challenge | C#, JavaScript, Docker

Oct 2023 – May 2024

- Developed a non-intrusive Augmented Reality User Interface that assists and enhances a user's experience when completing a simulated EVA mission on Mars using C# and .NET through Unity
- Created a custom RESTful API between a local mission control center and Microsoft HoloLens 2 to increase data streamlining efficiency of JSON data by 20% using JavaScript
- Spearheaded front-end development of a particular feature within the local mission control center using Agile methodologies and communicative strategies with partner university

#### Coderace.io – VandyHacks XI | TypeScript, Next.js, React.js, Node.js, GraphQL

Sept 2024

- Developed a user interface and experience that allows users to practice Data Structures and Algorithms related coding questions using Next.js on top of a React.js and TypeScript application
- Contributed to the development and efficiency of web-sockets to enable real-time multiplayer engagement in Node.js
- Integrated a reference to the OpenAI GPT-3.5 turbo API to evaluate a user's response to a prompt and verify the validity of their solution, giving feedback if the solution was not valid

#### Liquid Rocket Fuel Engine | Python, C++, Arduino, Raspberry PI

Aug 2023 – May 2024

- Improved data visualization within a rocket fuel engine by developing scripts for pressure transducers and sensors to relay critical data to a GUI, ensuring pressure levels within the engine were satisfactory using Python
- Calibrated pressure transducers to read the pressure sensed for a 10-pound thrust engine with C/C++ with 94.3% accuracy
- Implemented sensor data filtering, data storage, communication suppression and combustion control algorithms in C++

### SKILLS

**Programming Languages:** C/C++, C#, Python, Java, HTML/CSS, TypeScript/JavaScript, SQL

**Frameworks/Databases:** .NET, Next.js, React.js, Node.js, Spring Boot, MongoDB

**Technologies:** Git, GitHub, Docker, OpenCV, Linux, Visual Studio, IntelliJ